



ABOUT THE COVERS

Front: You can tell this *orangutan* is an adult male by his big, flappy cheek pads. Turn to page 6 for a dozen wild orangutan facts.

PHOTO BY SUZI ESZTERHAS

Back: If it weren't for those bugged-out eyes, you might never even notice this horned frog. It blends in perfectly with its leafy home.

PHOTO BY NICK GARBUTT/NPL/MINDEN PICTURES ®

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- Photo taken under controlled conditions
- Photo digitally altered

Dear Ranger Rick,



"HOWL" ABOUT THAT!

I recently camped out at Yellowstone National Park for a few nights. I saw many cool things such as the Milky Way, a family of bears, and many erupting geysers. But the most amazing thing about my trip was hearing a pack of

wolves howling late one night! Now I want to become a wolf biologist and work at Yellowstone.

Jessica D., Rhode Island



MAKE A MASK

I enjoyed your mask craft in last October's issue. I was inspired to make the leopard. Here's a picture of me with my creation!

Sophia P., California



Rangers: Want to make a wild mask, too? Go to rangerrick.org/animalmasks for instructions.

BEAR SCARE

I was reading a book one day when my siblings called me over to our door. I looked outside and saw a huge black bear next to our chicken coop! We shouted at it and even blasted a foghorn to scare it away. My brother blew his whistle, then the bear took off into the woods. It was such a beautiful animal!

Clarissa K., Virginia

TELL US!

Did you read the story about orangutans on pages 6–11? These great apes spend more time up in trees than any other large animal on Earth! How do you think your life would be different if you lived in a tree? What would your home be like? How would you get around?

Send your ideas to
Ranger Rick
11100 Wildlife Center Dr.
Reston, VA 20190-5362
E-mail: rick@nwf.org

We enjoy reading everyone's letters, even though we can publish only a few in the magazine.
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RATE THIS ISSUE

What do you think about this month's issue of *Ranger Rick?*Scan this QR code.



RETURNISTANCES

What birds always stick together?

Vel-crows.

Sofia F., California

Where does a mouse park its boat?
At the Hickory
Dickory Dock.

Alyse O., Arizona

How do shellfish get to the hospital?
In a clam-bulance.

Aaron C., Oklahoma

Why did the grizzly take off its sneakers?
It wanted to be bearfoot.

Mia A., California

What did the doctor give to the pig with a rash?

Oink-ment.

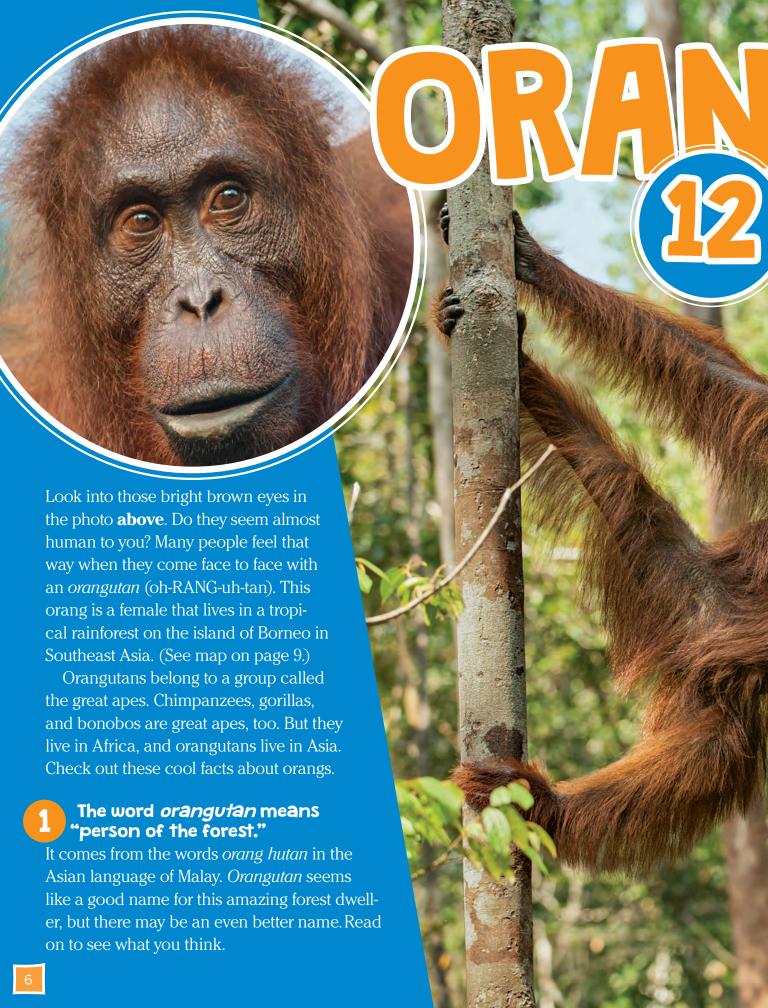
Marco C., Pennsylvania

What do you call a dog that does magic tricks?

A Labracadabrador.
Pete R., Oregon

WANT TO JOIN THE FUN? Send your favorite nature riddle with your full name and address to *Reader Riddles; Ranger Rick;* 11100 Wildlife Center Dr.; Reston, VA 20190-5362; E-mail: rick@nwf.org. We like reading all the riddles from our readers. We're sorry, but there's room to print only some of them. All submissions become the property of the National Wildlife Federation.

ART BY MICHAEL SLACK 5







Orangs eat more than 400 different kinds of food.

Orangutans are *omnivores* (AHM-nuh-vorz). That means they eat plants and animals. Fruit is a big favorite, but they eat lots of other things they

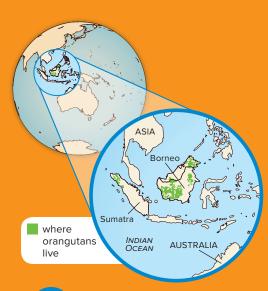
Orangutans are more endangered than any other great ape.

For many years, people have been cutting down the orangutans' forests and replacing them with buildings and farms—especially palm tree farms planted for harvesting palm oil. With most of the forests now gone, the number of orangs has fallen from about 230,000 to fewer than 50,000.

One place where orangs still survive is Borneo's Tanjung

of the forest.





Orangutans build new beds to sleep in every night.

To build a bed, an orang finds a sturdy branch high in a tree. Then it bends or breaks off smaller branches and weaves them together across the big branch. It even shapes some leafy branches into a pillow! After about five minutes of work, the orang has a nice, soft, ape-sized bed to sleep in.

Except for moms with babies, orangs spend their lives almost completely alone.

Females sometimes hang out with a few other females. But grown-up males are true loners.

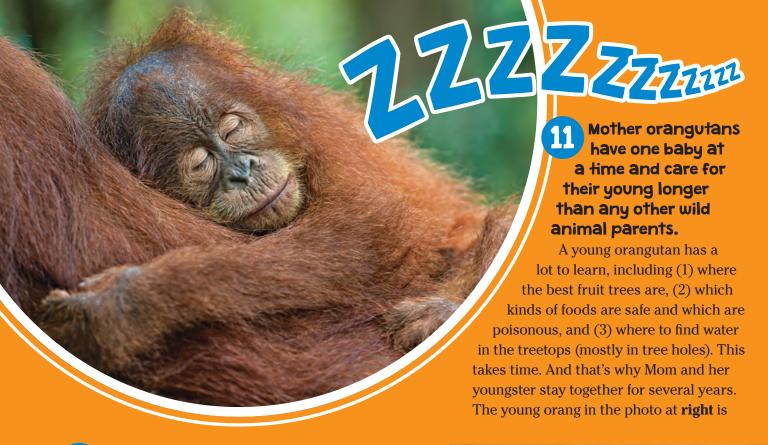
An orang makes a new leafy bed from scratch every night. Next time you are asked to "make your bed," think of what that means to an orang!

The only times they aren't alone are when it's time to mate with females or to fight other males to win a mate.

Male orangutans can be twice the size of females.

Some males grow up to be close to 200 pounds. These males also grow cheek pads— or "flanges"—that stick out from the sides of their faces and seem to attract females. Hanging beneath their chins are big throat sacs. The males use the sacs to make loud howling and rumbling calls. The calls are a warning to other males to stay away. To females, they're an invitation to mate.





Orangs love to nap.
A baby orangutan loves to take naps while hanging on to Mom. By holding on with hands and feet, the little one goes wherever Mom does.

Actually, orangs of all ages spend a lot of time napping.

After a busy morning of munching fruit, an orang may build a quick bed and take a peaceful afternoon snooze.

0rangutans are super smart.

Scientists who study orangutans are often amazed by the brainy things they do.

Planning ahead is an everyday thing in people, but it's rare in animals. That's why scientists were surprised to learn that male orangs plan where they will be traveling the next day. And then, using their loud calls, they tell nearby orangs where

they're going! This helps keep other males from crossing their paths. And it lets females know where they might find a mate.

Orangs are also smart enough to make simple tools. Some, for example, use sticks to scoop honey from bee hives or to reach hidden insects. Some even make "rain bonnets" out of leaves or fly swatters from leafy branches. They teach other orangs how to make and use tools, too.

How do you like my rain bonnet?





four years old, and he may stay with Mom for another four years or more! Only human kids stay with their moms longer. To download a Palm Oil Shopping Guide app for your phone, go to rangerrick.org/palmoilshopping.

Sigh...

Orangutans are daydreamers.
Like you, an orang often hangs out and quietly stares into space. We'll never really know what an orangutan is daydreaming about. But the one at right might be dreaming of a big, beautiful forest that will always be protected for orangutans!

There is a way that you and your family can help. Some palm oil comes from places where forests *aren't* being destroyed. By buying products made from *this* palm oil, you can join many others in saving orangutan habitat.



the state of the s

Planting Prairie

Twelve-year-old Christian Ebel lives with his family on a cattle ranch in northeastern Texas.

This part of Texas was once a big, beautiful prairie.

Then people moved in to build houses and plant crops. They also replaced native grasses and other

plants with different grass for cattle to graze on. Now only a small part of the prairie remains.

Land with only one kind of grass is OK for cattle but not so great for wild animals. So a few years ago, Christian's family decided to replant their ranch with native grasses and wildflowers. They scattered seed, letting the cattle "plant" it with their hooves. And they moved the cattle around the ranch, never let-

ting them graze too long in one place. (That helps the native plants survive.) This way, their cattle get healthy grass to eat, and birds and other wildlife get a perfect place to live.

Now, Christian is helping spread the word that other ranchers can raise cattle and make a home for wildlife, too. He wrote a speech about creating and protecting native grasslands, and he gives the speech at meetings and competitions.

Back home on the ranch, Christian likes to spend his time helping out, checking on the cattle, and playing hide-and-seek in the tall grass.

And no wonder: While he's hiding from his brother and his

ng from his brother and his friends, he gets to seek the meadowlarks, sparrows, butterflies, and other wildlife that live there, too!



Ranger Rick IS Coming to YouTube!

The National Wildlife Federation, the group that publishes Ranger Rick, has launched a new YouTube channel that's just for kids and families! The videos on RANGER RICK TV feature wildlife, wild places, and—of course—Ranger Rick and his friends. There are no commercials on RANGER RICK TV. And new videos will be uploaded almost every week. So ask your parents' permission, then check out RANGER RICK TV at rangerrick.tv/RRMagazine.



BUZZ BITS

Look out your window and up into the sky. Chances are good that you'll spot a bird flying by!

This year marks the 100th anniversary of the Migratory Bird Treaty Act, a law that protects many birds from being hurt or killed. To celebrate, several conservation groups declared 2018 the Year of the Bird. Ready to celebrate? Take this quiz about birds on the move!

- 1. A bar-headed goose (above) flies as high as ____ above sea level when migrating over the Himalayan Mountains.
 - **a.** 1,000 feet
 - **b.** 1 mile
 - **c.** 5.5 miles
- 2. The northern wheatear flies all the way from the Arctic to Africa each fall. But this powerful flyer weighs only as much as a . . .
 - a. slice of American cheese.
 - b. cheeseburger.
 - c. loaf of bread.
- 3. Most birds that migrate from the United States spend their winters in . . .
 - a. Europe.
 - **b.** Africa.
 - c. Central and South America.
- 4. Over its lifetime, an Arctic tern's flights between the Arctic and the Antarctic add up to as long as . . .
 - a. three trips around the Earth.
 - b. three trips to the moon and back.
 - c. a trip to Mars.

Answers: 1-c, 2-a, 3-c, 4-b

R.I.P., SPIDEY

Forty-three may not sound like an old age to you—or, at least, not to your parents. But for a spider, it's ancient. Until recently, the oldest known spider in the world lived in Australia. It was a trapdoor spider, and scientists had checked on it each year for 43 years! But this year, a scientist showed up at the spider's hole and found it gone-probably eaten by a wasp.



NEW BLUE

What's bright blue, shiny, and lives inside a rotting tree stump? Probably not much, other than this newly discovered tarantula! It lives in South America and is so new that it doesn't even have a name yet.

STORY AND PHOTOS BY MICHAEL PATRICK O'NEILL

Nighttime is the right time to photograph these hungry creatures from the deep.

arrow squid





Drifting in the dark ocean at night are some of the most amazing creatures in the world.
Lucky for me, I don't mind losing sleep to drift along with them!
I'm a photographer, and I took the photos in this story. Read on to see how I did it.

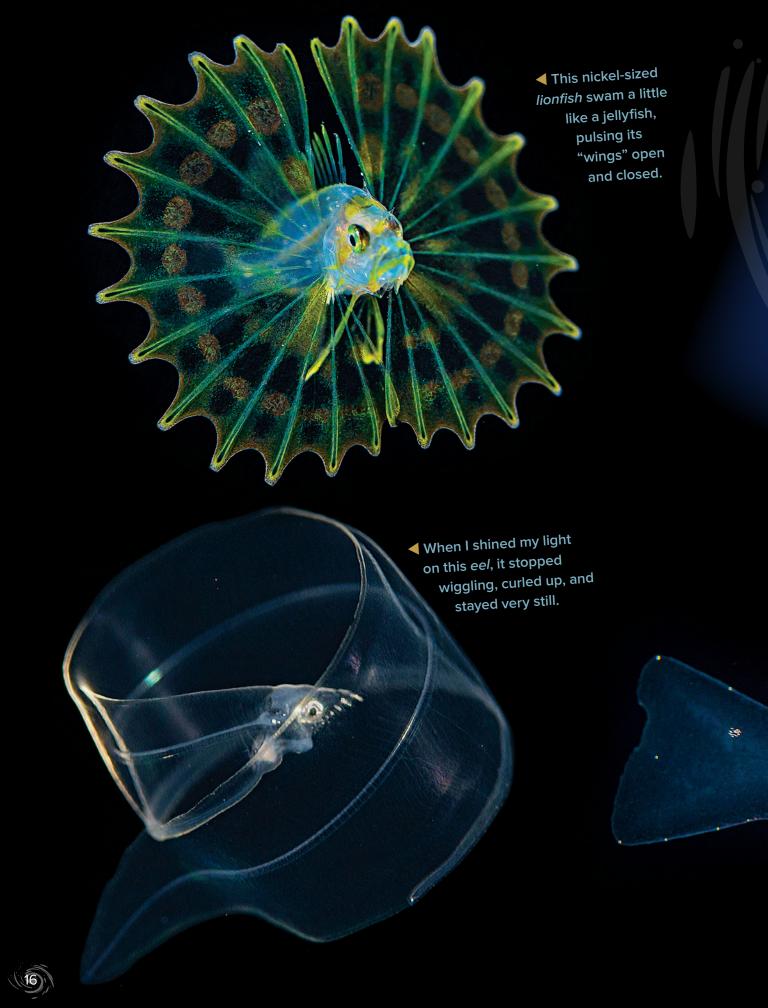
It's the middle of the night, and I'm in a boat miles off the Florida coast. "Here goes," I think to myself. I roll backward off the side of the boat and, immediately, I am surrounded by darkness. The only light is from my flashlight, as it slices a path through the inky water.

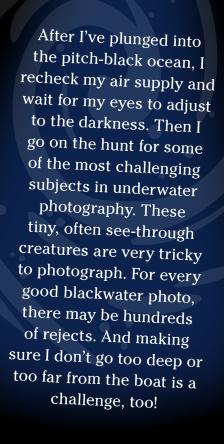
What am I doing in the dark ocean when most people are sleeping in their nice, dry beds? This is one of my favorite ways to photograph tiny deepsea creatures. It's called "blackwater photography" because it's done at night.

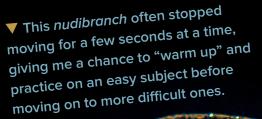
That's when the creatures move up from the deep to find food near the ocean surface. Most of these midnight snackers are babies: the larvas of fish, squid, and other creatures.

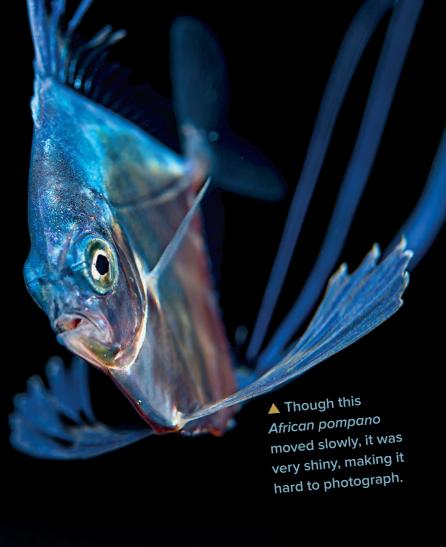
For a long time, these animals were only photographed lifeless and colorless in labs. But now blackwater photography is showing how spectacular they are in real life!



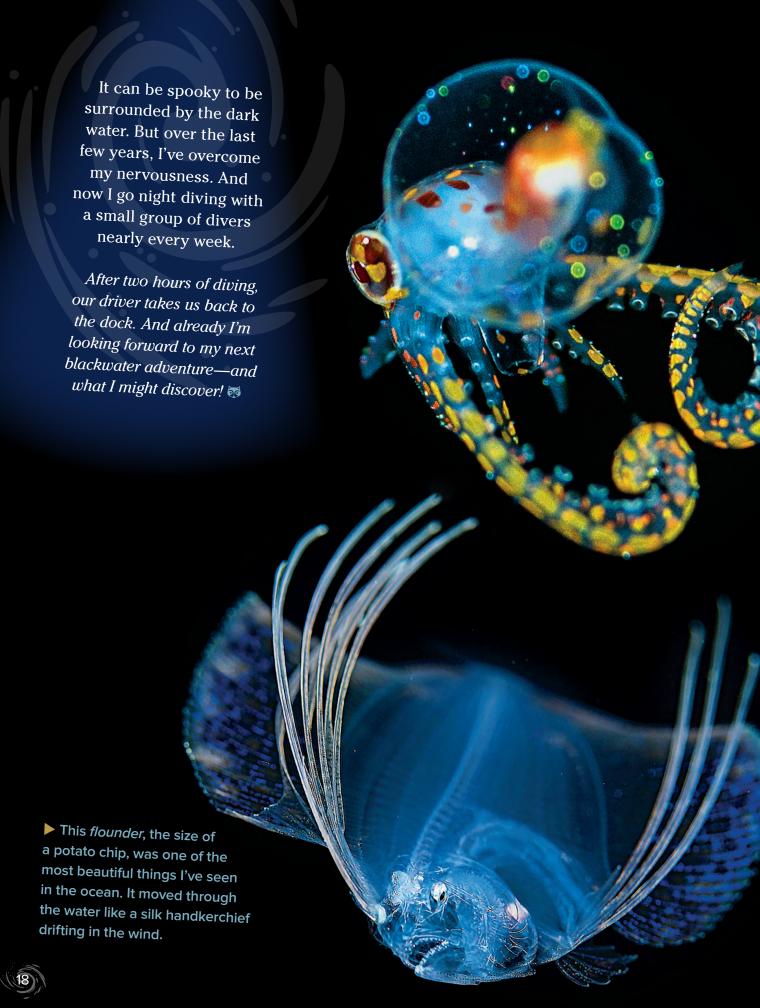










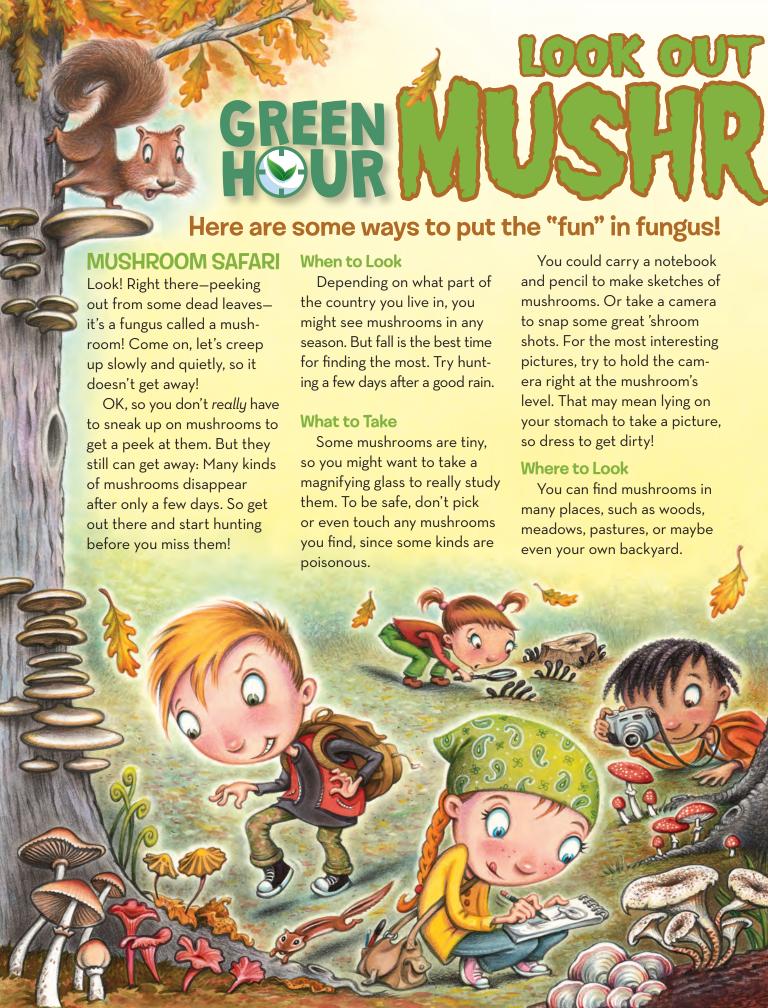




I was so absorbed while photographing this tiny long arm octopus that I found myself alone and much deeper than I meant to go. Not wanting to get lost, I quickly swam toward the surface and rejoined the other divers.



➤ Flying fish are my absolute favorites. They come in different colors, and their fins look just like insect wings.







Check around the bases of trees, on tree trunks, under dead leaves, beneath shrubs, on old rotting logs and stumps, and in lawns and gardens.

Once you find one mushroom, chances are you'll find more. Then you can "capture" them in drawings or photos.

Happy hunting!

Rangers: We'd love to see your mushroom photos and drawings. Send them to Ranger Rick; 11100 Wildlife Center Dr.; Reston, VA 20190-5362; E-mail: **rick@nwf.org** — *R.R.*

SPY ON SPORES

Spores are what mushrooms spread to make more mushrooms. Tiny and seed-like, a spore is too small to see without a microscope. But millions of spores together look like dust. You can see them by making a spore print.

Here's how:

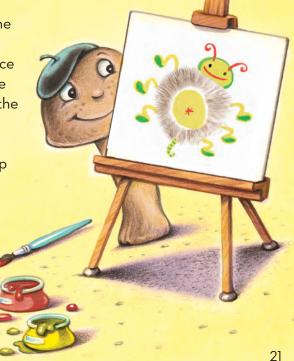
What You Need

- whole portobello mushroom from the grocery store
- light-colored sheet of paper
- wide drinking glass or bowl
- can of hairspray or spray fixative from an art supply store

What You Do

- 1. Remove the stem from the mushroom cap.
- 2. Place the cap on the piece of paper with the underside facing down. That's where the gills are, and the spores fall out from between the gills.
- **3.** Cover the mushroom cap with the glass or bowl.
- **4.** Leave it covered for 24 hours. Don't peek!

- **5.** When time is up, carefully remove the cover and mushroom cap to see your spore print.
- 6. Spray the print with the hairspray or fixative to keep the spores in place. Hang up your print for everyone to see. If you really want to get creative, you can make a picture using the spore print. Draw petals around it to make a flower; give it a head, antennas, and legs to make a bug; or come up with ideas of your own. You can even use several spore prints together to make a scene.







When scared, these animals stay and fightor at least look as if they might!

A swimming tiger cub is startled by something floating on the surface of a river. Before it realizes the "threat" is only a dried leaf, the tiger snarls, showing its sharp teeth. Watch out, leaf!

Whooo's that? A young longeared owl spreads its wings and fluffs up its feathers, trying to look as big and scary as possible. Those wide-open eyes are looking right at the thing that scared it—YOU!

When it spots a threat, a *porcupinefish* fills its stretchy stomach with air or water. The sharp spines on its skin stand up, making it too painful a meal to eat.







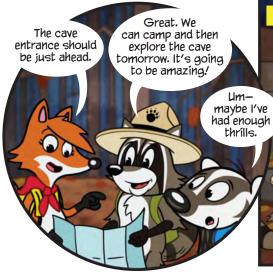






























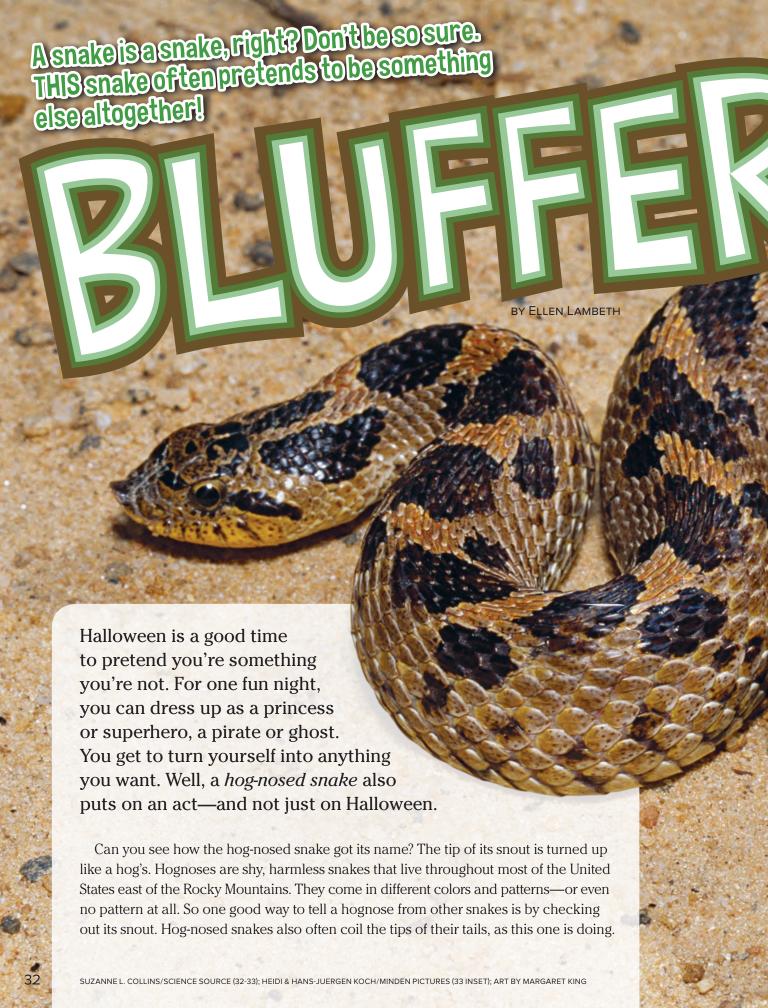


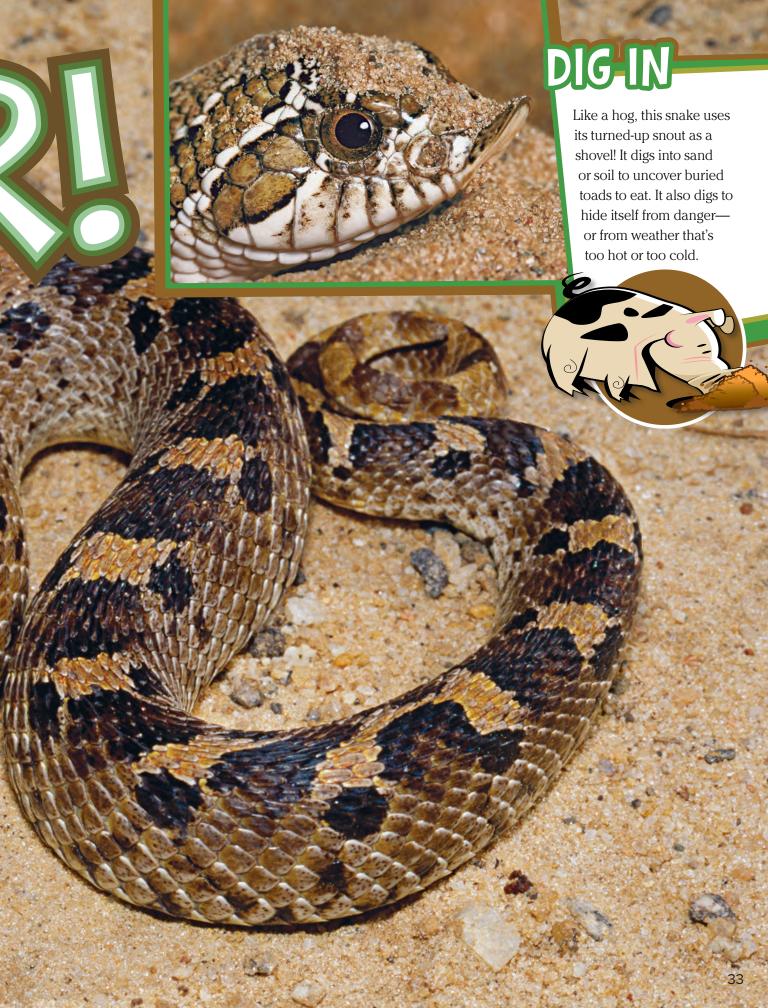




RANGER RICK'S FIELD NOTES

- Bats are very important in nature. A bat can eat its bodyweight in insects every single night!
- White-nose syndrome is a huge problem. Many people are working together to try to understand it and figure out how to save bats.
- Staying out of caves and mines where bats live is one way to avoid spreading the fungus. It also helps bats that
- are already sick. If they are disturbed when hibernating, they use up energy faster and are less likely to survive.
- In the eastern United States, where the fungus has been the longest, certain bats aren't getting sick. They may be adapting to the disease. Scientists are also working on a vaccine that could keep bats healthy.













All of the Halloween-colored animals in each row and each column have something in common.

What is it?



There are extra answers.

They all ...

- A. can fly.
- B. have scales.
- C. are reptiles.
- D. are mammals.
- E. have feathers.
- F. find their food in the water.
- G. have the letter "o" in their names.

3

- H. have the letter "g" in their names.







corn snake







Gila monste



frogfish

puffin





queen butterfly





































Opal is next to Owen, but she is not next to Ollie.







GRIZZLY bear



MANDRILL



Tasmanian DEVIL

FANG-TASTIC!

These animals aren't smiling. They're celebrating Halloween by showing off their scary fangs! Fit each word of their 4 names in all CAPITAL LETTERS in the rows at right. (Use the number of spaces and letter clues to help you.)



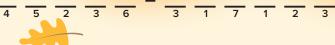
VAMPIRE bat

KING cobra

Write the letters from the orange boxes on their numbered lines below to find out which holiday

these animals like even better than Halloween!

MUSK deer









RangerRick.org/ rangerrickbookclub

